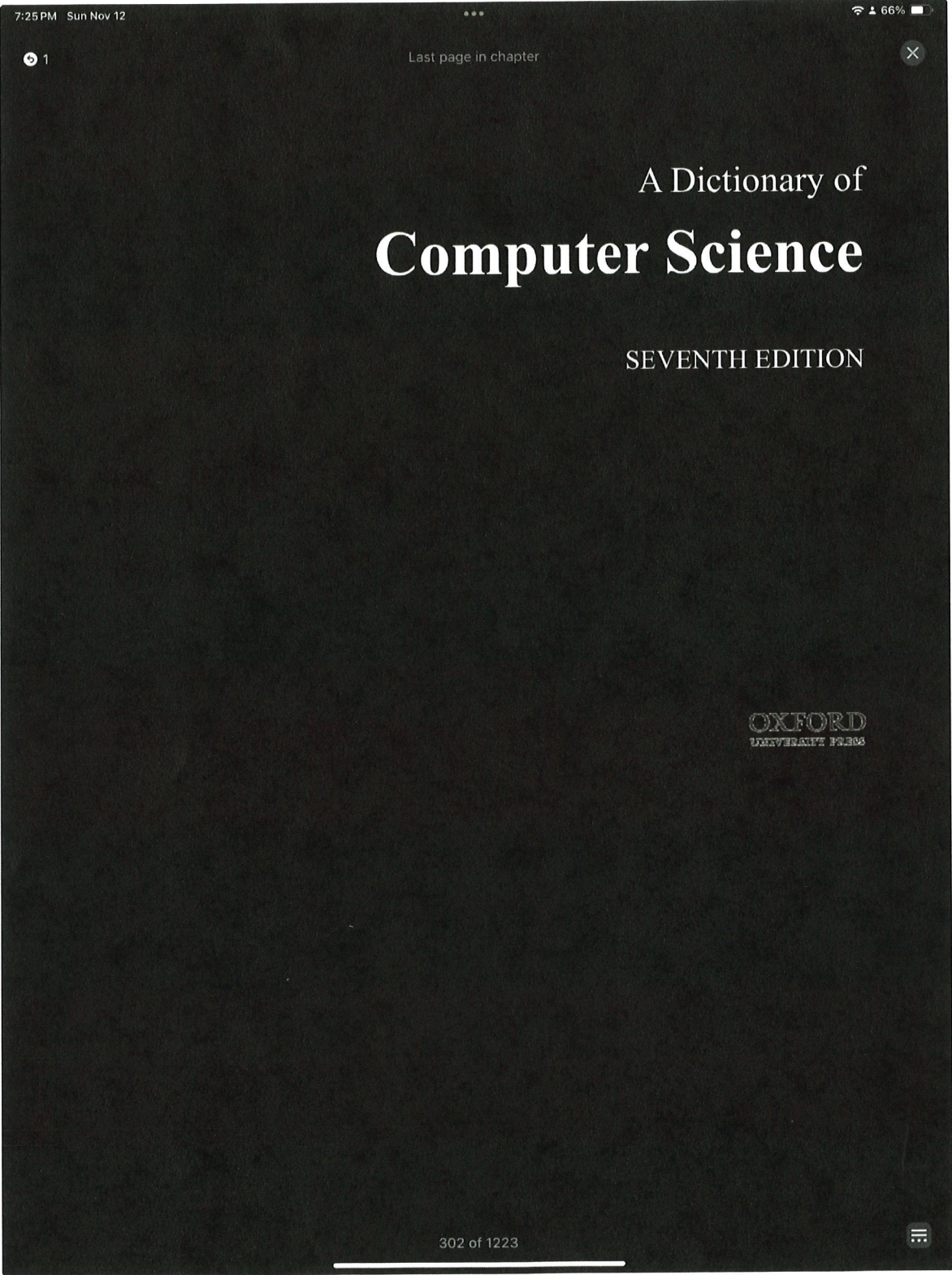


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paper tape I/O An obsolete but once widely used means of entering data into and extracting it out of a processor system using punched **paper tape* as the medium.

paper throw See *PAPER SLEW*.

paper white display A **positive display* where the background is white and the characters dark.

PAR (positive acknowledgment and retransmission) See *BACKWARD ERROR CORRECTION*.

paradigm A model or example of the environment and methodology in which systems and software are developed and operated. For one operational paradigm there could be several alternative development paradigms. Examples are functional programming, logic programming, semantic data modelling, algebraic computing, numerical computing, object-oriented design, prototyping, and natural language dialogue.

paradoxical combinator See *COMBINATOR*.

parallel Involving the simultaneous transfer or processing of the individual parts of a whole, such as the bits of a character. Compare *SERIAL*.

parallel access Access to a storage device in which a number of bits are transferred simultaneously rather than sequentially. For example, access to semiconductor memory almost invariably yields a number of bytes in parallel; by contrast access to the contents of a disk is usually serial in nature.

parallel adder A binary adder that is capable of forming sum and carry outputs for addend and augend words of greater than one bit in length by operating on corresponding pairs of addend and augend bits in parallel, i.e. at the same time. Parallel adders normally incorporate **carry lookahead* logic to ensure that carry propagation between subsequent stages of addition does not limit addition speed. See also *ADDER*, *SERIAL ADDER*.

parallel algorithm An algorithm designed to run 'efficiently' on a parallel computer. A parallel algorithm may involve a greater number of arithmetic operations than a serial counterpart. It is designed, however, so that many arithmetic operations are independent and can be performed in parallel, i.e. simultaneously.

parallel arithmetic Operation upon more than one bit or digit of a number at the same time. See *PARALLEL ADDER*.

parallel ATA (PATA) See *IDE*.

parallel composi Highlight Add Note Translate Search Copy Share...

parallel computer A computer that is capable of **parallel processing*.